

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***RESPONSE TO COMMENTS***

Title V Renewal Construction / Operating Permit

Permit: V-05-043 Revision 1

Kentucky Utilities Company - Ghent Station

Ghent, KY 41045

July 30, 2007

Ben Markin, Reviewer

SOURCE ID: 21-041-00010

SOURCE A.I. #: 704

ACTIVITY ID: APE20040002

**SOURCE DESCRIPTION:**

Kentucky Utilities (KU) was issued a draft Title V renewal permit on August 30, 2006 for their Ghent Electrical Generating Station. Comments were received from KU on September 28, 2006 that were numerous and in part requested that the Division revise a portion of the reporting requirements to standardized language recently developed by the Division for power plant permits in general. Additionally, KU cited several instances where the draft permit listed several CAM requirements that were inconsistent with the CAM Plan filed with the original application. The Division's Response to KU's comments is listed in Attachment A to this Statement of Basis. The Division has determined that the original CAM Plan did not provide for the use of a PM-CEMS or account for the different plant stack configurations that will result from the proposed construction of the wet flue gas desulfurization units (WFGD's). On December 11, 2006, KU submitted a revised CAM plan to account for these differences and describes monitoring provisions for interim periods. As a result of this revised CAM document and the comments submitted, significant revisions to the monitoring, recordkeeping and reporting of the draft permit were required. The Division is issuing this permit as Revision 1 to the original Draft permit V-05-043 and affording the public the opportunity to review this draft pursuant to 401 KAR 50:020 Sections 16 and 25 that include:

- Elimination of the Section H – Alternative Operating Scenario; this section originally was included to account for the various operating scenarios that will result from the ongoing construction of the WFGD's. Upon review, it was decided that this section did not actually present operating scenarios but rather listed changes to monitoring and reporting requirements. These changes have now been more clearly stated in Section B on a unit specific basis referencing the revised CAM.
- Incorporation of the Division's standardized language for power plants; this language works well with the monitoring approach proposed by the revised CAM and allows for consistent application and compliance with the permit conditions not just across each unit, but from plant to plant for KU.
- Consolidation of the Material Handling Emission Units on the basis of applicable regulation; the Emission Units for Coal, Limestone, and Gypsum material handling have nearly identical permit conditions when the same regulation is applied. Grouping these units has eliminated unnecessary redundancy, cleared up questions surrounding applicable standards, and aligned the permit more closely with the revised CAM, making the permit easier for compliance and enforcement from a practical matter.

**PUBLIC AND U.S. EPA REVIEW:**

On May 13, 2007, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Carrollton News Democrat* in Carrollton, Kentucky. The public comment period expired 30 days from the date of publication.

*Comment received*

Comments were received from Kentucky Utility an E-ON Company on June 22, 2007. Attachment A to this document lists the comments received and the Division's response to each comment. Minor changes were made to the permit as a result of the comments received, however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. Please see Attachment A for a detailed explanation of the changes made to the permit. The U.S. EPA has 45 days to comment on this proposed permit.

# ATTACHMENT A

## Response to Comments

Comments on KU Ghent Generating Station an E-ON Company. Draft Title V Air Quality Permit submitted by Marlene Zeckner Pardee, Senior Environmental Scientist.

### Title V Permit

1. Page 2, Unit 01/Applicable Regulations/40 CFR Part 64 – Should NOx be noted for CAM?

*Division's response:* While this unit has an active control device and is a large unit under the CAM regulation, ... the unit's NOx emissions are not subject because the only applicable standard is an "Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions within a source or between sources"..

2. Pages 4, Unit 01/Testing Requirements 3(d) – It is KU's understanding that Method 9's are required every 14 boiler operating days. If KU is unable to perform the Method 9, the reason must be documented. This process is repeated every 14 boiler operating days. Does KDAQ concur?

*Division's response:* Comment acknowledged. As stated in Section B.3 (e), This provision requires that a Method 9 be completed at least once during the 14 boiler operating day period or more frequently if requested by the Division. If the permittee is unable to complete a Method 9 test during the 14 boiler operating day period, and the permittee documents the reason that no Method 9 test was completed then the permittee will be considered by DAQ to be in compliance with the requirements of Section B.3 (e) of the permit. Please note that Section B.3 (e) does not address the number of attempts that must be made to conduct a Method 9 test, rather, it allows the permittee to document the reason that no Method 9 test could be completed during the 14 boiler operating day period.

*Section B.3 (e) also allows the permittee the discretion to choose to use the COM system to assure compliance in lieu of performing a Method 9 test every 14 boiler operating days.*

*Additionally, in Section B.4 (a), if the permittee is unable to complete a Method 9 test per subsection 4(a)(ii), if the permittee documents the reason, performs the inspections and makes any necessary repairs referenced in subsection (ii), then the permittee will be considered to be in compliance with the requirements of Section 4(a) of the permit.*

3. Pages 4-5, Unit 01/Specific Monitoring Requirements 4(a) & 4(b) – KU notified KDAQ of the installation and performance test/certification of the PM monitor for Unit 1 in October of 2006; hence, 4(a) is not presently applicable. KDAQ's response to comments (May 2007), question 2 on page 2 of 21, stated that the Division would accept the results of a successfully completed test to fulfill the PM

performance/compliance test including those completed after the issuance of the first Draft permit V-05-043. The PM CEM performance and monitor certification was submitted 2/9/07. Should 4(a) be removed from the permit and should 4(b) be changed from “after installation of a PM-CEM...shall be documented” to “The PM-CEM...shall be documented”?

*Division's response: It would be premature to remove 4a from the permit since KU has not yet applied for a waiver under the provisions of 401 KAR 61:005, Section 3 (18) to allow the substitution of a PM CEMS for the required opacity monitor. Upon receipt and approval of that waiver, the provisions contained in the permit under 3f. Testing Requirements, will supercede the 4a requirements and render them moot..*

*Reference to "after the installation" in 4b. has been deleted since the PM-CEM is already installed.*

4. Pages 10, Unit 02/Testing Requirements 3(e) – It is KU's understanding that Method 9's are required every 14 boiler operating days. If KU is unable to perform the Method 9, the reason must be documented. This process is repeated every 14 boiler operating days. Does KDAQ concur?

*Division's response: See Response to comment #2.*

5. Page 16, Unit 03/Applicable Regulations/40 CFR Part 64 – Should PM & NOx be noted for CAM?

*Division's response: Comment acknowledged, additions made.*

6. Pages 18, Unit 03/Testing Requirements 3(e) – It is KU's understanding that Method 9's are required every 14 boiler operating days. If KU is unable to perform the Method 9, the reason must be documented. This process is repeated every 14 boiler operating days. Does KDAQ concur?

*Division's response: See Response to comment #2.*

7. Page 24, Unit 04/Applicable Regulations/40 CFR Part 64 – Should PM & NOx be noted for CAM?

*Division's response: Comment acknowledged, additions made.*

8. Pages 26, Unit 04/Testing Requirements 3(e) – It is KU's understanding that Method 9's are required every 14 boiler operating days. If KU is unable to perform the Method 9, the reason must be documented. This process is repeated every 14 boiler operating days. Does KDAQ concur?

*Division's response: See Response to comment #2*

9. Page 36, Unit 06/Description – Typo, the equipment includes two crushers and **two** surge bins.

*Division's response: Comment acknowledged, additions made.*

10. Page 36, Unit 06/Testing Requirements 3(a- c) - Is the performance test (3b) only required if triggered (4.c Specific Monitoring Requirements) or requested by the Division? If not, when must this testing be performed?

Are 3a and 3c only required if requested by the Division? If not, when must these tests be performed?

*Division's response: The testing under 3b shall be conducted when required by observations of visible emissions under 4c or if required by the Division. .*

*For clarification, the Division has added the time line for the testing under 3a, which states that the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test for particulate compliance within one year of the issuance of this permit. 3c merely indicates the test method to be used when testing is required by the Division.*

11. Page 37, Unit 06/Specific Reporting Requirements 6(a) – There is no monitoring equipment. The monitoring method is qualitative visuals/Method 9's. KU requests that this information be submitted in the Semi-Annual Monitoring reports and not each calendar quarter.

*Division's response: Comment acknowledged, change made.*

12. Page 39 Unit 09-01 -11/Testing Requirements 3(a) - Is the performance test only required if triggered (4.c Specific Monitoring Requirements) or requested by the Division? If not, when must this testing be performed?

*Division's response: See response to comment #10.*

13. Page 39, Unit 09-01 - 11/Specific Reporting Requirements 6(a) – There is no monitoring equipment. The monitoring method is qualitative visuals/Method 9's. KU requests that this information be submitted in the Semi-Annual Monitoring reports and not each calendar quarter.

*Division's response: Comment acknowledged, change made.*

14. Page 42 Unit 08-02/Testing Requirements 3(a) - Is the performance test only required if triggered (4.c Specific Monitoring Requirements) or requested by the Division? If not, when must this testing be performed?

*Division's response: See response to comment #10. The Division assumes this comment is in reference to the Testing requirements 3b and not 3a as stated*

15. Page 42, Unit 08-02/Specific Reporting Requirements 6(a) – Is the performance test reporting only required if triggered (4.c Specific Monitoring Requirements) or requested by the Division?

*Division's response: Reporting is required whenever tests are conducted. This applies to particulate tests as well as opacity observations. Please refer to 40 CFR 60.676(f).*

16. Page 45, Unit 09-02, 10-02, 12,13,14/Testing Requirements 3(a - c) – Is the testing (3b) only required if triggered (4.c Specific Monitoring Requirements) or requested by the Division? If not, when must this testing be performed?

Are 3a and 3c only required if requested by the Division? If not, when must these tests be performed?

*Division's response: Testing under 3b is to be conducted when required by the observation of visible emissions under 4c or if requested by the Division.*

*For clarification , the Division has added the time line for testing under 3a, which states that the permittee shall submit within six months of the issuance date of the final permit a schedule to conduct a performance test within one year of the issuance of this permit.*

*3c indicates conditions under which testing is to occur. This condition is always applicable, not just when requested.*

17. Page 46, Unit 09-02, 10-02, 12,13,14/ Specific Reporting Requirements 6(a) & 6 (b) – There is no monitoring equipment. The monitoring method is qualitative visuals/Method 9’s. KU requests that this information be submitted in the Semi-Annual Monitoring reports and not each calendar quarter.

*Division’s response: Comment acknowledged, change made.*

18. Page 47, Unit 15, 16/Testing Requirements 3(a & b) - Is 3a (Method 22) only required if requested by the Division and Method 9 if triggered by 4c? What is the duration of the Method 9 if triggered?

*Division’s response: The Method 22 testing required in 3a shall be done if requested by the Division.*

*For clarification purposes, the latter part of 3a which addresses the duration of the Method 9 test has been moved to 3b. The duration of Method 9 testing requirements is stated in part.....” for each side of the building and the roof where visible emissions are observed to occur for one (1) minute or more during the respective 15 minute observation period.”*

19. Page 48, Unit 15, 16/Specific Reporting Requirements 6(a) - There is no monitoring equipment. The monitoring method is qualitative visuals/Method 9’s. KU requests that this information be submitted in the Semi-Annual Monitoring reports and not each calendar quarter.

*Division’s response: Comment acknowledged, change made.*

20. Page 51-52, Unit 26, 28, 31, 33/Testing Requirements 3a & b – Does each “affected unit” mean each emission point (17, 21, & 23)? It is KU’s understanding that we are to perform a Method 9 on emission points 17, 21, and 23, 60 days after reaching the maximum production rate, but not later than 180 days after the initial startup of each emission point. Please confirm.

*Division’s response: Yes.*

21. Page 51-52, Unit 26, 28, 31, 33/Is 3b only required if triggered (4.c Specific Monitoring Requirements) or requested by the Division? If not, when must this testing be performed?

*Division’s response: Yes, 3b testing is required if visible emissions indicated by 4c are observed or the Division requests such tests.*

22. Page 53, Unit 26, 28, 31, 33/ Specific Reporting Requirements 6(a) – When are the reports (performance tests, Method 9’s) due? KU was unable to locate a regulation which notes when the reports need to be submitted. Should these reports be submitted with the Semi-Annual Monitoring report, or just a statement, which states the date they were submitted, if the reports were submitted prior to the due date

of the Semi-Annual Monitoring report?

*Division's response:*

*Specific Reporting Requirement 6a is for the most part verbatim from the CFR except for the time line of submittal which was invoked under 401 KAR 52:020, Section 26. Additionally, Section F.5-monitoring record keeping reporting requirement of the permit address submittals in absence of specific requirement.*

*Secondly, the facility is required to monitor the OOO applicable emission points where qualitative daily observations and then method 9's as specified. Those method 9's are not a performance tests to demonstrate compliance. They are a monitoring tool to allow the facility to ensure they stay below the opacity standards and avoid a violation when inspected by the field office. On the issue of opacity submittal, a letter included in the summary report stating when the method 9's were performed will suffice, and shall be made available for inspection upon request from the Division.*

**CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.